

Claims

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- 5 1. A method of producing a glossy print, comprising the steps of:
printing an image onto a transparent medium; and
applying a backing over the printed image, thereby to produce a glossy
print of the image as viewed through the transparent medium.
- 10 2. The method of claim 1 wherein the applying step comprises the
steps of:
applying a colored liquid over the printed image; and
drying the liquid to form the backing.
- 15 3. The method of claim 2 wherein the applying step also comprises the
step of directing the colored liquid from a drop-on-demand type print head to
cover the printed image.
- 20 4. The method of claim 3 wherein the applying step also comprises the
steps of:
providing at least one ink cartridge having a selected configuration and
containing ink for printing the image; and
providing a backing cartridge that conforms to the configuration of the
ink cartridge and that contains the colored liquid.
- 25 5. The method of claim 1 wherein the applying step comprises
applying a liquid that is opaque when dried.
6. The method of claim 1 wherein the applying step comprises
applying a liquid that is white when dried.
7. The method of claim 1 including the step of moving the medium in
the same direction while both printing the image onto the transparent medium
and applying the backing over the printed image.
8. The method of claim 1 including the steps of providing as the
backing a solution of polyvinyl alcohol and titania particles.

9. The method of claim 8 including the step of directing ultrasonic radiation through the solution prior to the applying step, thereby to facilitate coating of the particles with the polyvinyl alcohol.

5 10. The method of claim 1 including the steps of coating the transparent medium with a translucent ink-receiving coating and printing the image on the coating.

11. The method of claim 1 wherein the applying step includes the step of bonding the backing to the transparent medium to cover the printed image.

12. The method of 11 wherein the bonding step includes moving the transparent medium after printing the image so that a side of the transparent medium carrying the printed image contacts and adheres to a sheet of opaque backing material.

13. An improved system for printing color images in a printer that prints an image using ink, such a printer including at least one ink container mounted thereto for carrying the ink and a print head connected with the container for expelling the ink, thereby to print the image onto a transparent medium, the improvement comprising:

20 a backing container containing a backing liquid and configured to mount to the printer and apply the backing liquid to cover the image that is printed onto the transparent medium.

14. The system of claim 13 wherein the backing liquid comprises a solution of polyvinyl alcohol and titania particles.

25 15. The system of claim 13 wherein the backing container includes a print head connected to the backing container, the print head being a drop-on-demand type.

16. The system of claim 15 wherein the print head connected to the backing container is a thermal ink-jet type print head.

17. The system of claim 13 wherein the printer includes a carriage for mounting the ink container thereto and wherein the backing container is configured to match the shape of the ink container, thereby to facilitate swapping of the backing container for the carriage-mounted ink container.

5 18. The system of claim 13 wherein the ink container is mounted so
that ink is expelled through a print zone from the print head that is connected
to the ink container, and wherein the backing container is mounted so that
backing liquid is directed through the print zone from a print head that is
connected to the backing container, the system including media path means
for twice moving a transparent medium across the print zone thereby to permit
successive printing of the image and covering of the image with the backing
liquid.

19. The system of claim 18 wherein the media path means includes retraction means for retracting the medium after printing the image and before applying the backing liquid so that the medium moves through the print zone in the same direction when the image is printed and when the backing liquid is applied.

~~20. The system of claim 13 including mounting means for mounting
the backing container at a location such that the medium moves with
substantially no direction change from a position to receive the ink image to a
position in which the backing liquid is applied.~~

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